

REMARKS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claim 1, 3-14, 16, and 19-22 are presently active in this case. The present Amendment amends Claims 1, 3-12, 16, and 19 and cancels Claims 2, 15, 17, and 18 without prejudice or disclaimer.

Claim 1 is amended with the subject matter of cancelled Claim 2; and Claim 12 is amended with the subject matter of cancelled Claims 15, 17, and 18. Claims 6-11 and 19 are amended to address the outstanding rejections under 35 U.S.C. § 112. In light of their formal nature, the changes to Claims 1, 6-12, and 19 are not believed to raise a question of new matter. In addition, Claims 1, 3-6, 10, and 12 have been amended to recite a digital filter. Non-limiting support for a digital filter is found, for example, on page 6, lines 16-18 of Applicants' specification. Therefore, the amendment to Claims 1, 3-6, 10, and 12 are not believed to raise a question of new matter.¹

In the outstanding Office Action, Claims 10 and 11 were rejected under 35 U.S.C. 112, first paragraph as failing to comply with the enablement requirement. Claims 12-22 were rejected under 35 U.S.C. 112, second paragraph as being indefinite. Claims 6-11 and 19 were rejected under 35 U.S.C. 112, second paragraph as being incomplete. Claims 1-22 were rejected under 35 U.S.C. 102(e) as being anticipated by Lomp et al. (U.S. Patent No. 6,215,778, hereinafter "Lomp").

In response to the rejections under 35 U.S.C. §112, first and second paragraphs, Claims 6-12 and 19 are amended to overcome the issues raised in the outstanding Office Action; therefore, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. 112. It is believed that all pending claims are enabled, definite, and complete and no

¹ See MPEP 2163.06 stating that "information contained in any one of the specification, claims or drawings of the application as filed may be added to any other part of the application without introducing new matter."

further rejection on these bases is anticipated. If, however, the Examiner disagrees, the Examiner is invited to telephone the undersigned, who will be happy to work with the Examiner in a joint effort to derive mutually acceptable language.

In response to the rejection of Claims 1-22 under 35 U.S.C. § 102, Applicants respectfully submit that Claims 1, 3-14, 16, and 19-22 are not anticipated by Lomp because each and every element as set forth in those claims is not found, either expressly or inherently described, in the cited reference. In an anticipation rejection, MPEP § 2131 requires that the identical invention must be shown in as complete detail as is contained in the claim.

According to a feature of the invention as set forth in Claim 1, a receiver intended to receive signals is recited, comprising, among other features, processing channels, at least one of which includes an adapted digital filter and a recovery circuit configured to produce a clock signal. The other channels each include a sliding correlator controlled by the clock signal produced by the recovery circuit of the channel including the adapted digital filter.

Claim 12 recites a receiver for receiving signals, a spectrum of the signals being spread using sequences, comprising, among other features, a first channel configured to recover a clock signal therefrom, the first channel including a digital filter having coefficients adapted to a first sequence. The receiver also comprises a second channel configured to process a second signal of the signals, the second channel being controlled by the clock signal recovered from the first channel and being free of a clock signal recovering circuit.

As explained in Applicant's specification at page 8, lines 18-26, the receivers of Claims 1 and 12 improve upon conventional devices because they combine the advantages of adapted filters and sliding correlators by using an adapted digital filter in at least one channel in order to restore rapidly and efficiently the symbol clocks signal, and by using sliding correlators in the other channels so as to benefit from their low level of complexity. Thus, the complexity of the receiver is reduced by the use of correlator, without the efficiency of

the symbol clock signal restoration suffering as a result since the latter is provided by an adapted digital filter (cf. page 8, line 30 – page 9, line3). In conventional systems, a receiver for a CDMA system comprises either channels with only adapted filters, or channels with only sliding correlators. For example, Lomp discloses the kind of receiver comprising channels with only sliding correlators.

The outstanding Office Action asserts that pilot AVC 1711, despreaders 1703-1709, and acquisition and track logic 1701 and IPM 1702 anticipate the recited filter, the sliding correlators, and the recovery circuit, respectively. In addition, it is asserted that the acquisition and track logic 1701 and the IPM 1702 are configured to produce a clock signal PNCLK to control the despreaders 1703-1709. Applicants respectfully disagree and submit the Lomp has been incorrectly characterized.

Applicants respectfully submit that the cited passages of Lomp do not substantiate the assertion the acquisition and track logic 1701 and the IPM 1702 are configured to produce a clock signal PNCLK to control the despreaders 1703-1709. These three cited passages of Lomp are as follows:

- (1) *col. 46, lines 10-13 reads* “[i]n the exemplary embodiment, the AID 1730 provides the I and Q digital receive message signal data as 2's complement values, 6 bits for I and 6 bits for Q which are clocked through an 11 stage shift register 1820 responsive to the receive spreading-code clock signal RXPNCLK. The signal RXPNCLK is generated by the timing section 1401 of code generation logic 1304;”
- (2) *col. 46, lines 38-45 reads* “The output signals of the despreaders are combined in combiner 1920 forming correlation signal DSPRDAT of the Pilot AVC 1711, which is received by the ACQ & Track logic 1701 (shown in FIG. 17), and ultimately by modem controller 1303 (shown in FIG. 13). The ACQ & Track

logic 1701 uses the correlation signal value to determine if the local receiver is synchronized with its remote transmitter,” and

(3) *col. 47, lines 35-41 reads* “Referring to FIGS. 13 and 17, the algorithms are performed by the Modem controller 1303, which provides clock adjust signals to code generator 1304. These adjust signals cause the code generator for the despreaders to adjust locally generated code sequences in response to measured output values of the Pilot Rake 1711 and Quantile values from quantile estimators 1723B.”

As to the second citation, the outstanding Office Action fails to explain its relationship to a time signal to control the despreaders. As to items (1) and (3), Applicants note that the code sequences provided by the code generator 1304 and used by the receive channel despreaders 1703-1709 are timed in response to a SYNK signal of the system clock signal.² Furthermore, as clearly explained by Lomp, RXPCLK is not the signal generated by IPM 1702, but rather a clock signal generated by the timing section 1401 of the code generation logic 1304.³ Applicants respectfully submit that Lomp is silent with respect to PNCLK being a time signal that controls the despreaders 1703-1709. In fact, the only place that PNCLK seems to appear in Lomp is in the output of IPM 1702. Unfortunately, the outstanding Office Action simply reaches a conclusion, but fails to substantially explain how PNCLK is a time signal that controls the despreaders.

Applicants note that a similar problem exist with the rejection of Claim 12 based on the assertion that PNCLK is a time signal to control channel PN1 of despreader 1703.

Based at least on the foregoing, Applicants respectfully submit that Claims 1 and 12 are not anticipated by Lomp. In addition, Claims 2-11 and Claims 13, 14, 16, and 19-22

² See, Lomp, col. 45, lines 46-52.

³ See, Lomp, col. 46, lines 11 and 12.

should be allowed, among other reasons, as depending either directly or indirectly from Claims 1 and 12 respectively, which should be allowed as just explained.

In addition, Applicants respectfully submit that Claims 4 and 5 are not anticipated by Lomp. As explained, in Lomp, element 1711 does not maintain the clock signal controlling the sliding correlators as recited in Claim 4 because PNCLK does not control the despreaders' clock. As such, element 1711 cannot be an element that maintains the clock signal permanently as recited in Claim 5.

As applied to Claim 11, the outstanding Office Action asserts that the code generator 1304 of Lomp inherently generates clock signals that are synchronous to one another. If that is so, such signals cannot anticipate the subject matter of Claim 11, which are clock signals offset relative to each other. As related to the suggestion of inherency, Applicants respectfully submit that the Office bears the burden to show and "must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art."⁴ "The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic."⁵ Furthermore, evidence of inherency "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill."⁶ Applicants respectfully submit that the Examiner has not met this burden.

Therefore, Applicants respectfully request that the anticipation of Claims 1, 3-14, 16, and 19-22 under 35 U.S.C. §102(e) based on Lomp be withdrawn.

⁴ M.P.E.P. §2112, citing *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

⁵ *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

⁶ *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268-69, 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991) (emphasis added).

Applicants further respectfully submit that the outstanding Office Action was made final prematurely⁷ because the cited reference was not properly applied to the claims,⁸ thus preventing Applicants to provide a complete reply to the outstanding Office Action at the earliest opportunity in order to expedite the prosecution process of this application.⁹ As it stands, Applicants believe that the outstanding grounds of rejection of record have not been clearly developed to such an extent that applicant may readily judge the advisability of an appeal.¹⁰ The Office is respectfully reminded that “when a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.”¹¹ Therefore, Applicants respectfully request withdrawal of the finality of the outstanding Office Action.

Finally, Applicants note that the present amendment is submitted in accordance with the provisions of 37 C.F.R. §1.116, which after a Final Rejection permits entry of amendments placing the claims in condition for allowance or in better form for consideration on appeal.¹² As the present amendment is believed to overcome the outstanding rejections under

⁷ “Any question as to prematurity of a final rejection should be raised, if at all, while the application is still pending before the primary examiner.” MPEP § 706.07(c).

⁸ “Before final rejection is in order a clear issue should be developed between the examiner and applicant. To bring the prosecution to as speedy conclusion as possible and at the same time to deal justly by both the applicant and the public, the invention as disclosed and claimed should be thoroughly searched in the first action and the references fully applied; and in reply to this action the applicant should amend with a view to avoiding all the grounds of rejection and objection. Switching from one subject matter to another in the claims presented by applicant in successive amendments, or from one set of references to another by the examiner in rejecting in successive actions claims of substantially the same subject matter, will alike tend to defeat attaining the goal of reaching a clearly defined issue for an early termination, i.e., either an allowance of the application or a final rejection.” MPEP § 706.07, (emphasis added).

⁹ “The goal of examination is to clearly articulate any rejection early in the prosecution process so that the applicant has the opportunity to provide evidence of patentability and otherwise reply completely at the earliest opportunity.” MPEP § 706.

¹⁰ “In making the final rejection, all outstanding grounds of rejection of record should be carefully reviewed, and any such grounds relied on in the final rejection should be reiterated. They must also be clearly developed to such an extent that applicant may readily judge the advisability of an appeal unless a single previous Office action contains a complete statement supporting the rejection.” MPEP § 706.07.

¹¹ 37 C.F.R. § 1.104(c).

¹² See, for example, MPEP § 714.12.

Application No. 09/701,391
Reply to Office Action of November 17, 2004


35 U.S.C. §§ 112 and 102, the present amendment places the application in condition for allowance. In addition, the present amendment is not believed to raise new issues since the changes to Claims 1 and 12 were merely the addition of features previously recited in other dependent claims as previously explained. It is therefore respectfully requested that 37 C.F.R. § 1.116 be liberally construed, and that the present amendment be entered.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1, 3-14, 16, and 19-22 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicant's undersigned representative at the below listed telephone number.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Gregory J. Maier
Attorney of Record
Registration No. 25,599
Philippe J. C. Signore, Ph.D.
Registration No. 43,922

Customer Number
22850

Tel. (703) 413-3000
Fax (703) 413-2220
GJM/PJS/MQM/kkn

I:\ATTY\MQM\19's\199649US\AMD 3.16.05.DOC

Surinder Sachar
Registration No. 34,423